

**PATENT COOPERATION TREATY**

From the  
INTERNATIONAL SEARCHING AUTHORITY

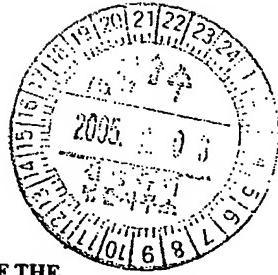
To:  
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**PCT**

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

(PCT Rule 43bis.1)



Date of mailing (day/month/year) <b>31 JANUARY 2005 (31.01.2005)</b>
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Applicant's or agent's file reference <b>04FKWM017</b>		<b>FOR FURTHER ACTION</b> See paragraph 2 below
International application No. <b>PCT/KR2004/002631</b>	International filing date (day/month/year) <b>15 OCTOBER 2004 (15.10.2004)</b>	Priority date(day/month/year) <b>16 OCTOBER 2003 (16.10.2003)</b>
International Patent Classification (IPC) or both national classification and IPC <b>IPC7 F24C 15/32</b>		
Applicant <b>LG ELECTRONICS, INC. et al</b>		

**1. This opinion contains indications relating to the following items:**

- Box No. I Basis of the opinion
- Box No. II Priority
- Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- Box No. IV Lack of unity of invention
- Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- Box No. VI Certain documents cited
- Box No. VII Certain defects in the international application
- Box No. VIII Certain observations on the international application

**2. FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later. For further options, see Form PCT/ISA/220.

**3. For further details, see notes to Form PCT/ISA/220.**

Name and mailing address of the ISA/KR

  
Korean Intellectual Property Office  
920 Dunsan-dong, Seo-gu, Daejeon 302-701,  
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WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/KR2004/002631

Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

This opinion has been established on the basis of a translation from the original language into the following language  
, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).

2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

- a. type of material
- a sequence listing  
 table(s) related to the sequence listing
- b. format of material
- in written format  
 in computer readable form
- c. time of filing/furnishing
- contained in the international application as filed.  
 filed together with the international application in computer readable form.  
 furnished subsequently to this Authority for the purposes of search.
3.  In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/KR2004/002631

**Box No. V Reasoned statement under Rule 43bis.I(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Claims	1-21	YES
	Claims		NO
Inventive step (IS)	Claims	2, 5, 7-17, 20	YES
	Claims	1, 3, 4, 6, 18, 19, 21	NO
Industrial applicability (IA)	Claims	1-21	YES
	Claims		NO

**2. Citations and explanations :**

Reference is made to the following documents:

D1: US 5,798,505 B

D2: JP 7-151334 A

D1 discloses a microwave oven comprising a cooking cavity, an electric chamber and an air flow system including first air vents, second air vents, an air guide forming an exhaust passage, and exhaust holes formed on a rear plate.

The features of claims 1, 3, 18 and 19 are a cooking cavity, an electric chamber, intake holes, exhaust holes, an exhaust guide covering said exhaust holes, and exhaust passage holes formed on a back plate.

Comparing claims 1, 3, 18 and 19 with D1, it would be obvious to a person skilled in the art to derive claims 1, 3, 18 and 19 from D1.

The features of claims 4, 6 and 21 are characterized by said exhaust guide separated from the cavity and formed as two parts having different widths.

D2 discloses an exhaust duct separated from the cavity and formed as two parts having different widths, and it would be obvious to a person skilled in the art to combine the microwave oven of D1 comprising a cooking cavity, an electric chamber, and an air flow system including first air vents, second air vents and exhaust holes formed on a rear plate with the exhaust duct of D2, thereby arriving at the invention of claims 4, 6 and 21.

Therefore, claims 1, 3, 4, 6, 18, 19 and 21 lack an inventive step under PCT Article 33(3).